REMARKS

Claims 12-47 are currently pending. Claims 12-21, 22, 26, 36, and 41 are amended herein.

Claim Objections

Claims 13, 22, and 41 are objected to under 37 CFR §1.57(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claims 13, 22, and 41 have been amended to further limit the subject matter of the previous claim.

Rejections Under 35 U.S.C. §112

Claims 18, 19, and 26 have been rejected under 35 U.S.C. §112 for insufficient antecedent basis. To provide Claims 18, 19, and 26 with sufficient antecedent basis, they have each been amended to recite "conductive material."

Rejections Under 35 U.S.C. §102

Claims 12-14, 16-23, 25, 26, 30, 32-42, and 47 are rejected under 35 U.S.C. §102(b) as being anticipated by Morrissey, U.S. Patent No. 5,277,790. Claims 12, 13, 15-18, 20-22,24-26, 30, 32-41, and 47 are rejected under 35 U.S.C. §102(b) as being anticipated by Berdan et al., U.S. Patent No. 4,169,018. Claims 12, 13, 18, 20-22, 26, 30, 32-35, and 37-41 are rejected under 35 U.S.C. §102(e) as being anticipated by Landau et al., U.S. Patent No. 6,113,771. Claims 12-14, 19, 21-23, 27, 30, and 32-43 are rejected under 35 U.S.C. §102(b) as being anticipated by Drent, U.S. Patent No. 5,369,074. Claims 12, 13, 18, 21, 22, 26, 28, 29, 32-39, 41, 44, and 45 are rejected under 35 U.S.C. §102(e) as being anticipated by DeNinno et al., U.S. Patent No. 6,147,089.

Claim 12 has been amended to recite that a concentration of the oxidizer is selected for depositing the conductive material on the substrate while a surface of the conductive material is polished by a pad to achieve a planar surface; Claims 13-20 have been amended to conform with the amendment of Claim 12. Claim 21 has been amended to recite that the oxidizer is present in the plating solution in an amount suitable for simultaneous deposition and polishing of the conductive material on the substrate to achieve a planar surface of the conductive material. Claim 36 has also been similarly amended to recite adding an effective amount of oxidizer to the

plating solution, wherein the conductive material can be deposited and polished in the plating solution to result in a planar surface. These amendments are fully supported by the specification, as originally filed, at, for example, page 7, lines 15-19 (""Metal layers deposited and planarized using such a solution would yield desirable flat surfaces as shown in Figure 1e in a short period of time and would even achieve the structure depicted in Figure 1f if using a single machine.), page 14, lines 5-26, and page 17, lines 6-7.

None of the cited references discloses or suggests a plating solution having an oxidizer in an amount ***effective for both*** depositing and polishing conductive material to achieve a planar surface, as recited in Claims 12, 21, and 36, as amended. Prior art plating solutions are not suitable for polishing and planarizing "with the same solution, simply because the plating solutions are formulated only for plating," not for polishing or planarization." Specification, at page 4, lines 27-30. None of the cited references teaches polishing conductive material with the same plating solution used for depositing the conductive material. Morrissey, Berdan et al., and Landau et al. are directed to ***depositing*** conductive material with a plating solution, but do not teach or suggest ***polishing*** with the same plating solution, as recited in the pending claims, as amended. Drent and DeNinno et al. teach neither plating nor polishing of conductive material. Drent is directed to a catalyst composition for producing linear alternating polymers and DeNinno et al. are directed to protein inhibitors and pharmaceutical compositions containing such inhibitors to elevate plasma lipid levels. Neither Drent nor DeNinno teaches or suggests ***plating or polishing*** of conductive material. Therefore, the solutions in the cited references are not selected or formulated for simultaneous plating and polishing to result in a planar layer.

Claims 12, 21, and 36, as amended, are therefore patentable over the cited references as they are not anticipated by any of the cited references. Claims 13-20, 22-35, and 37-47 are also patentable because they depend from and include all of the limitations of Claims 12, 21, and 36, respectively. Furthermore, each of the dependent claims recites further distinguishing features of particular utility.

Rejections Under 35 U.S.C. §103

Claims 15 and 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Morrissey. Claim 31 is rejected under 35 U.S.C. §103(a) as being unpatentable over Berdan et al. Claims 16, 17, 25, 46, and 47 are 35 U.S.C. §103(a) as being unpatentable over Landau et al.

As discussed above, independent Claims 12, 21, and 36 are patentable over the cited references because none of the cited references discloses or suggests a plating solution having an oxidizer in an amount ***effective for both*** depositing and polishing conductive material to achieve a planar surface, as recited in Claims 12, 21, and 36, as amended. Claims 15-17, 24, 25, 31, 46, and 47, which depend from and include all of the limitations of Claims 12, 21, or 36, as amended, are also patentable over the cited references. Furthermore, each of the dependent claims recited further distinguishing features of particular utility.

Conclusion

Applicants respectfully submit that all of the pending claims are patentably distinguishable and allowable over the prior art of record. The cited references, either alone or in combination, do not teach or suggest the claimed invention.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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